

Abstract

An electrical connector mountable to a substrate. The electrical connector comprises a housing, a surface mount contact secured to the housing and adapted to surface mount to the substrate, and a non-surface mount hold down secured to the housing and adapted to mount to the substrate. The surface mount contact includes a fusible element, for example, a solder ball, a plurality of which may form a matrix array. The connector may be a ball grid array connector. A method of mounting an electrical connector to a substrate. The method comprises providing a substrate, and an electrical connector having a contact and a hold down. The method further comprises securing the contact to the substrate, placing the hold down into the substrate, and securing the hold down to the substrate. A method of preventing the skewing of an electrical connector when being mounted to a substrate. The method comprises providing an electrical connector having a first part with a mass greater than a second part, and balancing the first and second parts of the electrical connector such that the electrical connector remains substantially parallel to the substrate when mounting to the substrate. An electrical connector mountable to a substrate. The electrical connector comprises a housing having a mounting end facing the substrate, and a plurality of contacts secured to the housing. The electrical connector further comprises a plurality of fusible elements, each secured to a respective one of the plurality of contacts, and a standoff extending a distance from the mounting end of the housing. An improved ball grid array connector mountable to a substrate. The improvement comprises a hold-down adapted to enter an opening in the substrate. The hold-down may be adapted to enter the opening without an interference fit.